Review of the
"Cranmer Report"

At the request of the USEPA, WESTON has reviewed the "Cranmer Report". This report is a presentation of an "RI/FS Study Plan as an alternative to the GMI Plan" (Section 1.1.1). The GMI Plan is the December, 1986 RI/FS Work Plan by Gheraghty and Miller, Inc. for Mass Merchandisers Inc.

WESTON has reviewed this plan for general technical completeness, compliance/noncompliance with the current National Contingency Plan (NCP) and the technical requirements of the NCP as detailed in the "Guidance on Remedial Investigations under CERCLA" (May 1985) and "Guidance on Feasibility Studies under CERCLA" (April 1985).

This review is in the format of specific comments on the text through each section where appropriate followed by general comments on the section as a whole.

There is no Table of Contents.

1.1 INTRODUCTION, HISTORICAL REVIEW & DESCRIPTION OF THE SITE

Section 1.1.1, Page 1 para. 3	Comments on the relevance and cost of activities proposed by GMI are not appropriate in this document.
Section 1.1.2, Page 2 para. 3	This section appears to be a collection or statement of facts. To our knowledge "several sinkholes" are not "evident on the site".
Section 1.1.3, Page 2 para. 6	The conclusion that the site does not pose an imminent and substantial risk is not appropriate in the Historical Review. The review should be fact not conclusion, especially from an advocacy position.
Section 1.1.3, Page 8 para. 2	The last sentence concludes that the ground surface or near surface "site strata" acts as an aquitard. This is a conclusion with out any substantiation.
Section 1.1.4, Page 9 para. 5,6	These paragraphs are self-serving and do not belong in an RI work plan.
Section 1.1.4, Page 10 para. 4	This paragraph appears to mix the terms aquifer and aquitard. Furthermore it is an overly restrictive description of a valid goal of the RI.

Section 1.5	The numbering for the rest of this section is not consistent with the numbering up to here.
Section 1.9, Page 19 thru 33	There is no discussion of potential impacts in this section.
Section 1.9, Page 19 para. 6	"Regional Climatology" does not belong in "Review of Potential Impacts". (Same comment on the other headings in this section.)

General Comments on Section 1

This whole section (1.1 thru 1.9) is disorganized, contains oversimplifications, conclusions and contradictions that demonstrate a general lack of understanding of the problem and the standard approach to solving the problem.

The primary objective of the data collection and evaluation phase of the RI is to summarize existing information on hazardous waste sources, pathways, and receptors and to evaluate potential impacts on public health, welfare, and the environment. The work should be sufficient to support design of the Remedial Investigation Work Plan. Very little analytical data is presented in this section and there is no discussion of potential impacts.

2.1 SAMPLING PLAN

Section 2.1.1, Page 34 para. 1	The rest of the Sampling Plan does not support attainment of the stated objective.
Section 2.1.2, Page 34 para. 2	Many figures and attachments are not in this copy. This review is limited to what was provided.
Section 2.1.3, Page 34 para. 4	There is not enough data to support such a restrictive list of target compounds at this time. Much of the previously collected data are suspect. The target parameter list should be selected only after sampling and analyses within this program establishes the validity of their use.
Section 2.1.4, Page 35 para. 1	There is no mention of the woodchip pile.
Section 2.1.4.1, Pg. 35 para. 5	The samples from the sinkhole should be analyzed for the Target Compound List (TCL) established by EPA under CERCLA through the Contract Lab Program.

Section 2.1.4.2, Pg. 35 para. 6	This paragraph is out of place and confusing.
Section 2.1.4.1, Pg. 36 para. 5	Surface and deeper samples should be analyzed for dibenzodioxin and dibenzofuran.
Section 2.1.4.2, Pages 36-38 para. 3	Borings to auger refusal may not be sufficient since the residual material may be full of chert, and augers may not be able to penetrate to top of rock. This may be an important horizon for the channeling or collection of contaminants.
Section 2.1.4.2, Pg.38 para. 3	"Verification of target parameters" this sounds like the intent is to prove the presence and usefulness of the preselected target parameters by analyzing only the for them. This is not acceptable.
Section 2.1.4.3, Pg. 38 para. 10	There are other runoff areas that should be sampled. This is noted on page 39, paragraph 10 where more locations are noted. This is confusing.

General Comments on Section 2.1

This section fails to satisfy the technical requirements of the NCP in the following areas:

- While the objective of identifying major contaminants is clearly stated, it is not satisfied since the target parameters are preestablished.
- Without the decision trees and sample locations on maps, the question of the existence of a program that will result in sufficient data to determine the nature and extent of the conditions is questionable.
- The NCP clearly requires a determination of the target parameters based on existing information about products used and on analytical results that include the HSL as defined in CERCLA sections 101(4) and 104(a)(2). This plan specifically excludes the HSL compounds and starts with a restricted list of potentially used compounds. In our opinion this is not acceptable.

Quality Assurance Project Plan (QAPP)

The QAPP is incomplete. It cannot be evaluated beyond the statement that what is included so far generally conforms to

requirements. This QAPP deals almost exclusively with laboratory QA/QC. It does not cover any field QA/QC (this is not in the Sampling Plan either). Much of what is in the list of QAPP elements (p. 40) is not in the QAPP.

Health and Safety Plan

The Health and Safety Plan is incomplete. It cannot be evaluated beyond the statement that what is included so far generally conforms to requirements, with a few exceptions. One exception is that no training beyond the 2 hour familiarization presentation seems to be required for those working on site. A current 40 hour OSHA approved training should be required.

Data Management Plan

This section is totally inadequate. It only addresses laboratory data management. It does not address field data management or health and safety record management. It also states that "Management will assume that sampling team members will be familiar with the required documentation procedures before field activities begin". This is not acceptable.

2.4 TASK 3 - SITE INVESTIGATION

Section 2.4.1, Page 112 para. 2	Based on Section 2.1 some of these objectives cannot be achieved. - The waste source cannot be characterized using the list of parameters in Section 2.1.3. - The nature and extent of vertical migration may not be determined using only soil borings to auger refusal.
Section 2.4.1.1 Pg 113 para. 2	Phase I activities as defined will not satisfy the data needs described here.
Section 2.4.1.2 Pg 114 para. 4	Again the waste will not be characterized by the list of compounds in Section 2.1.3.
Section 2.4.1.3 Pages 114-118	- The stated purpose of the Geologic and Hydrologic investigation and the identification of data gaps is reasonably complete. The major omission is no additional wells in Phase I. This probably sets up almost a guarantee for wells being required in Phase II. As long as this is recognized it is acceptable. - Parts of this appear to be excellent. We would need the Appendices to fully evaluate the approach.

Section 2.4.1.6 Pg 119 para. 6	- The stream flow measurements should be made at several other locations. The data from this exercise may only raise more questions than it answers.
Section 2.4.2 Pages 120 - 122	- In our opinion much of this should be in Phase I. o Cricket Creek Sampling o Seasonal sampling o Monitor Wells

Sections 2.4.1 and 2.4.2 as presented here generally fail the sufficiency of data requirements for an RI. In our opinion much of what is presented is very good but much of it falls short of an adequate program for determining the nature and extent of contamination at and in the area of this site. There are several protocols that potentially will result in the program only confirming the preconceptions. The most notable one is that the seven compounds listed in Section 2.1.3 are sufficient for characterizing the wastes and tracking the extent of contamination.

Section 2.6 Page 123	This Section presents biological degradation pilot or bench-scale studies as the only remedial technology to be evaluated. Part of the RI effort is to use the site characteristics and the available technologies to select technologies for evaluation. If this is the intent it is not evident by this section.
Section 2.7 Pg. 123-126	The items to be included in the RI Report do not conform to the guidance on technical requirements to satisfy the National Contingency Plan. This list (page 124) demonstrates some of the potential deficiencies of the Work plan, i.e., lack of attention to demography and land use, full water quality information, air quality concerns and off site sediment data.
Section 2.7.4 Pg. 126-128	The Endangerment Assessment Section is potentially generally complete although too generalized to properly evaluate.
Section 2.8 Pages 128-129	This Section is very general. If it is intended to be handled by Cranmer and Associates we would question the advisability of not retaining a public relations firm/consultant to handle Community Relations.

(Page 130 missing)

The discussion of the HRS Calculation is not appropriate in an RI Work Plan.

Summary Comments Remedial Investigation Work Plan

This Work Plan is very disorganized and it is difficult to accurately assess what is proposed for some of the activities. Beginning with Section 2.4, Task 3 SITE INVESTIGATION, it closely follows the format of the Model Scope of Work in the RI Guidance Document. In Section 2.1 thru 2.3 some of the headings are consistent with the Guidance Document but in several sections the text does not cover the topic.

It appears that, perhaps, the Work Plan was done by several people, some of whom have a good grasp of what an RI is about and some of whom do not. Section 2.4.1.3 is very good and responds to the requirements of the NCP. Section 2.1.3 does not.

In my opinion the RI Work Plan establishes a scope of work in Phase I that fails to satisfy the NCP requirement for sufficiency of data to satisfy the requirement that the site be characterized to the extent necessary to determine the nature, extent, pathways of migration and potential adverse impact on human health and the environment.

A large problem exists in the Work Plan Section 2.1. It was apparently written with a prejudice toward several conclusions:

- Analyses for seven compounds is sufficient to characterize the waste sources and contamination extent.
- "An imminent and substantial risk to man and the environment does not exist."
- Groundwater is the only migration pathway.

The study as described in Section 2.1 may well confirm all of the above. The study described in Section 2.4 has a good chance of determining actual conditions.

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FEASIBILITY STUDY

The Feasibility Study, as presented here, is not a Work Plan. It appears to be an attempt at a Phase I FS Report based on existing data, literature and conjecture from the Endangerment Assessment; with a general implication that more work is required. There are no details as to what form the scope of work to complete the FS will take.

The outline of the report, in the Executive Summary, generally follows the outline of the Guidance Document but the body of the report does not. There is no discussion of Institutional Issues. There is a mixing of tenses in many of the paragraphs that makes it hard to determine which tasks CAI considers completed and which ones are not.

I believe that specific comments on the individual sections relative to the NCP are not appropriate. The document is so disorganized that it needs to be entirely rewritten to be consistent with the Guidance Document. When this is done it will become more evident where the data gaps are and how to address them. Many of the steps required in an FS appear to be in the document but it is hard to evaluate the conclusions before substantial work on the RI has been completed.

ENDANGERMENT ASSESSMENT

The Endangerment Assessment concludes that:

- The only expcsure route for containments from the site is ground water.
- There is no risk to human health.

These conclusions are based solely on existing data and extrapolations through paths of migration that have not been characterized.

In my opinion the Endangerment Assessment does not meet the criteria for input to the FS.

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